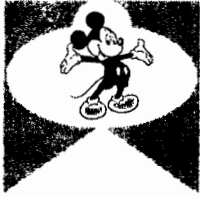


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Post Accident Training Guide
Update
Shop Panel Operator Procedures



Update Training Guide - Monorail Shop Panel Operator Procedures

Document Number: WLLMONOTP0100A

Objective: To update the Trainee on Monorail Shop Panel Operating Procedures

The topics in this section include:

- Dispatching Monorails From Shop Spur To Express Mainline
- Applying Power to Magic Kingdom Monorail Beams
- Applying Power to Epcot Monorail Beams
- Removing Power From the Magic Kingdom Monorail Beams
- Removing Power From the Epcot Monorail Beams
- Switching Monorails From Express To Resort Beam
- Switching Monorails From Resort To Express To Shop Spur and Express To Spur
- Moving Switchbeams In The Monorail Shop
- Moving The Epcot Switchbeams
- Bringing Up and Taking Down Rectifiers
- Line Up Contactors

Topic	Knowledge/Procedures
Dispatching Monorails from Shop Spur to Express Mainline	<p>Explain to the Trainee the procedures for Dispatching Monorails from Shop Spur to Express Mainline.</p> <ul style="list-style-type: none">• Verify the Monorail has a green status clip attached and that the pre-flight PM is completed.• If not already accomplished, perform the following:• Walk the length of the Monorail to verify that there are no obstructions and the path is clear.• Verify the skirt doors and belly pans are closed and secure.

Topic	Knowledge/Procedures
	<ul style="list-style-type: none">• Walk both sides of the monorail beam for the Monorail being dispatched to ensure all obstructions are behind the yellow clearance line and clear of the monorail to be moved. Also, ensure objects located on the exterior roof outside the maintenance door are clear of the dispatching Monorail's pathway.• Verify all collector arms are on the outer edge of the buss bar.• Disconnect and remove the battery charger.• Disconnect the shop air hose.• Visually verify Monorail Pilot is located in Cab 1 of the Monorail (the Monorail can only be operated from the cab of forward direction) by verifying that the strobe on Cab 6 is flashing/active.• Remove the status clip.• View the MONORAIL SHOP CONTROL PANEL to verify switchbeams are lined up correctly for the Monorail being dispatched out of shop.• Verify the Monorail shop door for the appropriate beam, is open.• If applicable, on the Disconnect Cabinet (BEAM DISC), remove lock and place handle to the ON position. Reapply lock.

Topic	Knowledge/Procedures
	<ul style="list-style-type: none">• Sound the Notification Alarm and make a general shop announcement alerting Monorail Shop Personnel that the beam is coming hot. (Mention the color of the Monorail that is on the beam - Example: "<i>Beam #2, black Monorail coming hot; Beam #2 black Monorail coming hot</i>").• After visually verifying that all personnel are clear of the beam, energize the beam by turning the 600Vdc power switch (TURN 600V ON, PUSH 600V OFF) to the left, on MONORAIL SHOP CONTROL PANEL.• Observe that lights under the selected beam are flashing and shop bell is ringing.• Verify the beam has been energized by visually checking status lights on MONORAIL SHOP CONTROL PANEL have illuminated red, and visually checking power meters on the WEST STORAGE BEAMWAY METER PANEL (west side of shop) or on the EAST STORAGE BEAMWAY CONTROL PANEL (east side of shop).• Receive radio confirmation from Monorail Central, verifying how many Monorails will be dispatched from Monorail Shop. Confirm that there are no Monorails or other obstructions on beamway that would conflict with Monorails coming out of Monorail Shop.



Topic	Knowledge/Procedures
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Do not perform any Monorail Mainline switching until you have received radio confirmation from Monorail Central to begin.



As the Monorail Pilot is given permission to move forward, you must be in a position from where you can observe the Monorail and have your hand on a 600V Trip Switch, ready to de-energize power, should that be necessary.

NOTE: The Monorail Pilot will make a direct visual verification of proper switchbeam alignment prior to proceeding through any switches.

- Monorail Shop Panel Operator will notify first Monorail to be dispatched out of the shop, via radio communication, as follows:

MONORAIL (COLOR), SHOP, YOUR REAR STROBE IS 10-8. I SHOW YOU CLEAR TO PROCEED USING MAPO OVERRIDE THROUGH THE SWITCHES TO THE NORTH SIDE OF THE CHILLER PLANT. HOLD AND NOTIFY SHOP/SWITCHBEAM.

- The Monorail Pilot will repeat the radio device transmission to confirm that it was received and understood.



If the Monorail moves in a direction different than commanded, immediately de-energize the beam.

- When the Monorail passes Switchbeam 3, Monorail Pilot will radio the Monorail Shop with the status of the Beam Contacts received between the shop and Switchbeam 3.

Topic	Knowledge/Procedures
	<ul style="list-style-type: none">• When Monorail arrives at the north side of chiller plant, the Monorail Pilot will notify Monorail Shop, via radio communication, as follows. <i>SHOP, MONORAIL (COLOR), 10-20 NORTH SIDE OF CHILLER PLANT.</i>• The Monorail Shop Panel Operator will repeat the radio device transmission to confirm that it was received and understood.• View the Video Monitor to verify that the position of the Monorail is at the North side of the chiller plant. <p>NOTE: If more than one Monorail is being dispatched, de-energize the Spurline beam, align the yard switches (3, 4, 5, 6, and 7) for the next Monorail to be dispatched, and energize appropriate beams using established procedures.</p> <ul style="list-style-type: none">• When clearance has been received from Monorail Central, via radio, that it is clear to move the Monorail from Spur to Express, repeat the radio device transmission to confirm that it was received and understood. Then, move Switchbeam 2 to the Spurline with power, as follows:• On the MAGIC KINGDOM CONTROL panel, turn the MASTER CONTROL switch to the ON position, and note that the MAINLINE CONTROL indicator illuminates green, on the MAGIC KINGDOM POWER STATUS board.• On the MAGIC KINGDOM CONTROL panel, pull out the SWITCHBEAM E-STOP button.

Topic	Knowledge/Procedures
	<ul style="list-style-type: none">• On the MAGIC KINGDOM CONTROL panel, push in the STA/SWB ENABLE button.• On the MAGIC KINGDOM CONTROL panel, push in the EXPRESS 600V de-energize (TURN TO CLOSE, PUSH TO OPEN) button and ensure the power drops out.• On the MAGIC KINGDOM CONTROL panel, turn the SWITCHBEAM switch to the SPUR position.• On the MAGIC KINGDOM CONTROL panel, push in the SWITCHBEAM ACTIVATION button.• View the Magic Kingdom monitor map and observe that the switchbeam is in motion (text is flashing), and then locks down (text stops flashing), and that the switch shows in the Spurline position. Visually verify, by viewing the video monitor that the switchbeam has moved to the Spurline position.• When the switchbeam is locked in the Spur position, push in the STA/SWB ENABLE button, on the MAGIC KINGDOM CONTROL panel. The EXPRESS switch must be moved to the CLOSE position within 20 seconds. Ensure power is restored.• Verify that the chiller plant contactor closes, as indicated by the status light on the MAGIC KINGDOM POWER STATUS board.• Monorail Shop Panel Operator will then notify Monorail (color) as follows. <p><i>MONORAIL (COLOR), SHOP, I SHOW YOU CLEAR, MAPO OVERRIDE, THROUGH THE SWITCH TO PYLON 66. HOLD AND NOTIFY CENTRAL.</i></p>

Topic	Knowledge/Procedures
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- The Monorail Pilot will repeat the radio device transmission to confirm that it was received and understood.



If the Monorail moves in a direction different than commanded, immediately de-energize the beam

- As the Monorail crosses World Drive (as verified by viewing the video monitor), dispatch the next Monorail, if applicable, to the north side of the chiller plant, using established procedures. Repeat this procedure as required to dispatch all Monorails.
- Visually monitor the Monorail movement through the switch by viewing the Video Monitor.
- After clearing the switch, the Monorail Pilot will notify Monorail Central of the Monorail's 10-20 and status of beam contact switches, as follows:

CENTRAL, MONORAIL (COLOR) BE ADVISED HOLDING PYLON 66, ALL BEAM CONTACTS [HAVE/HAVE NOT (LIST)] CLEARED.

- If there is more than one Monorail coming out of the Monorail Shop, Monorail Central will clear the Monorail to the Magic Kingdom Station. Monorail Central will also instruct the Monorail Pilot, via radio, to notify Monorail Shop, via radio that the Monorail has arrived at the Magic Kingdom station.
- After notification from the Monorail Pilot, via radio, that the Monorail has arrived at the Magic Kingdom station, you are clear to begin the switching process for the next Monorail, if necessary.
- After the final Monorail has switched to the Mainline and reaches Pylon 66, begin switching Switchbeam 2 to the Mainline, as follows:

Topic	Knowledge/Procedures
	<ul style="list-style-type: none">• De-energize shop beam by pushing the 600V power button on the MONORAIL SHOP CONTROL PANEL and visually verify the red light goes out on the MONORAIL SHOP CONTROL PANEL and verify the power meters on the WEST STORAGE BEAMWAY METER PANEL (west side of shop) or the EAST STORAGE BEAMWAY CONTROL PANEL (east side of shop) have gone to 0V.• On the MAGIC KINGDOM CONTROL panel, turn the MASTER CONTROL switch to the ON position• On the MAGIC KINGDOM CONTROL panel, pull out the SWITCHBEAM E-STOP.• On the MAGIC KINGDOM CONTROL panel, push in the STA/SWB ENABLE button.• On the MAGIC KINGDOM CONTROL panel, push in the EXPRESS 600V trip button and verify power has de-energized.• On the MAGIC KINGDOM CONTROL panel, turn the SWITCHBEAM switch to the MAINLINE position.• On the MAGIC KINGDOM CONTROL panel, push in the SWITCHBEAM ACTIVATION button.• View the Magic Kingdom monitor map and observe that the switchbeam is in motion (flashing), and then locks down (stops flashing). Visually verify, by viewing the video monitor, that the switchbeam has moved to the Mainline position.

Topic	Knowledge/Procedures
	<ul style="list-style-type: none"><li data-bbox="834 251 1523 451">• When switchbeam locks on the Mainline position, on the MAGIC KINGDOM CONTROL panel, push in the STA/SWB ENABLE button. This will allow 20 seconds to close the express contactor by turning the EXPRESS switch to the CLOSE position.<li data-bbox="834 472 1523 672">• When the Express Beam is energized, as verified by a red indication on the Magic Kingdom Monitor/Map Board, on the MAGIC KINGDOM CONTROL panel, turn the MASTER CONTROL switch to the OFF position and, push in the SWITCHBEAM E-stop button.<li data-bbox="834 693 1523 821">• While switching to Mainline is taking place, Monorail Central will instruct the Monorail Pilot, via radio, how to proceed, when they have received power.<li data-bbox="834 898 1523 991">• As soon as Switchbeam 2 is locked down on Mainline and energized, notify Monorail Central, as follows: <i>CENTRAL, SHOP, BE ADVISED SWITCHBEAM 2 LOCKED DOWN MAINLINE WITH POWER.</i><li data-bbox="834 1119 1523 1217">• Monorail Central will repeat the radio device transmission to confirm that it was received and understood.

**Applying Power to Resort
& Express Monorail
Beams**

Monorail Shop Panel Operator will receive notification via Radio Communication from Monorail Central requesting power on Express and Resort Beams.

*MONORAIL SHOP, CENTRAL, READY FOR POWER
ON EXPRESS AND RESORT BEAMS.*

- Monorail Shop Panel Operator will repeat the radio device transmission to confirm that it was received and understood.
- The qualified Panel Operator will complete the following to apply power to the Magic Kingdom Monorail Beams:
- Turn the MASTER CONTROL switch to the ON position (located on Magic Kingdom shop control panel) and note that the MAINLINE CONTROL indicator is illuminated green.

NOTE: The Southeast Push Buttons and Switches are not active and will not respond.

- Push in the ENABLE push button located on the Shop Operator Panel to the corresponding zone that requires power. The ENABLE push button will then be active (illuminated) for ten seconds.
- While the Enable push button is active, turn the Express and Resort Zone switches (one at a time) to the TURN TO CLOSE position. Holding Turn to close switch in that position for one to two seconds, then release slowly.
- Panel Operator will then view the Magic Kingdom map to verify that the zones have turned from green to red, indicating that they are now energized. Repeat for all remaining zones.
- Once all zones are energized, the Panel Operator will turn the MASTER CONTROL switch to the OFF position, and note that the MAINLINE CONTROL indicator light is extinguished.

- Notify Monorail Central that the requested Beams have been energized:

MONORAIL CENTRAL, SHOP, POWER HAS BEEN APPLIED TO EXPRESS AND RESORT BEAMS.

- Central will repeat the radio device transmission to confirm that it was received and understood, then will coordinate with the Stations the requirement to apply power in the stations.

**Applying Power to Epcot
Monorail Beams**

Monorail Shop Panel Operator will receive notification via Radio Communication from Monorail Central that power is required on the Epcot beam

*MONORAIL SHOP, CENTRAL, READY FOR POWER
ON THE EPCOT BEAM*

- Monorail Shop Panel Operator will repeat the radio device transmission to confirm that it was received and understood.
- The qualified Panel Operator will complete the following to apply power to the Epcot Beam:
- Observe that the touch screen Epcot control panel is activated. If Epcot panel is in screen saver mode, touching the screen will cause it to activate.
- Turn the SYSTEM MASTER switch to the ON position. Then push in the ENABLE switch and note that the switch illuminates and will only be enabled (active) for fifteen seconds.
- While enable is active on touch screen control panel, touch Lineup Control and observe that Zone Energize and De-energize messages appear.
- Touch the zone Energize Block and observe that the Zone East and West Energize appears
- Touch the Energize East and West Block to Energize the East and West Zones.
- View the Epcot map to verify the zones have turned from green to red, indicating that they are energized. Repeat for remaining zones.
- When all zones are energized turn the SYSTEM MASTER switch located on Epcot control panel to the OFF position. Monorail Shop Panel Operator:
- Notify Monorail Central that the requested Zones have been energized.

*MONORAIL CENTRAL, SHOP, POWER HAS BEEN
APPLIED TO THE EPCOT BEAM.*

- Central will then coordinate with Stations the requirement to apply power in the stations.

**Removing Power from
Resort & Express
Monorail Beams**

Explain to the Trainee the procedure for removing power from the Resort & Express Monorail beams.

- Central will coordinate with the Stations the requirement to remove power in the stations.
- Monorail Shop Panel Operator will receive notification via Radio Communication from Monorail Central requesting power be de-energized on Express and Resort Beams

MONORAIL SHOP, CENTRAL, READY TO DE-ENERGIZE POWER ON EXPRESS AND RESORT BEAMS.

- Monorail Shop Panel Operator will repeat the radio device transmission to confirm that it was received and understood.
- The qualified Panel Operator will complete the following to de-energize power to the Magic Kingdom Monorail Beams:
- Turn the MASTER CONTROL switch to the ON position (located on Magic Kingdom shop control panel) and note that the MAINLINE CONTROL indicator is illuminated green.

NOTE: The Southeast Push Buttons and Switches are not active and will not respond.

- Push in the ENABLE push button located on the Shop Operator Panel to the corresponding zone that requires power. The ENABLE push button will then be active (illuminated) for ten seconds.
- While the ENABLE push button is active push the Express and Resort Zone buttons (one at a time).

- Panel Operator will then view the Magic Kingdom map to verify that the zones have turned from red to green, indicating that they are now de-energized. Repeat for all remaining zones.
- Once all zones are de-energized, the Panel Operator will turn the MASTER CONTROL switch to the OFF position, and note that the MAINLINE CONTROL indicator light is extinguished.
- Notify Monorail Central that the requested Beams have been de-energized.

MONORAIL CENTRAL, SHOP, POWER HAS BEEN DE-ENERGIZED TO EXPRESS AND RESORT BEAMS.

Removing Power from the Epcot Monorail Beams

Central will coordinate with the stations the requirement to remove power in the stations.

- Monorail Shop Panel Operator will receive notification via Radio Communication from Monorail Central requesting power be de-energized on the Epcot beam.

MONORAIL SHOP, CENTRAL, READY TO DE-ENERGIZE POWER ON THE EPCOT BEAM

- Monorail Shop Panel Operator will repeat the radio device transmission to confirm that it was received and understood.
- The qualified Panel Operator will complete the following :
- Observe that the touch screen Epcot control panel is activated. If Epcot panel is in screen saver mode, touching the screen will cause it to activate.
- Turn the SYSTEM MASTER switch to the ON position. Then push in the ENABLE switch and note that the switch illuminates and will only be enabled (active) for fifteen seconds.
- While enable is active on touch screen control panel, touch Lineup Control and observe that Zone Energize and De-energize messages appear.
- Touch the zone De-Energize Block and observe that the Zone East and West De-Energize appears
- Touch the De-energize East and West Block to De-Energize the East and West Zones.
- View the Epcot map to verify the zones have turned from red to green, indicating that they are de-energized. Repeat for remaining zones.
- When all zones are de-energized turn the SYSTEM MASTER switch located on Epcot control panel to the OFF position.

- Monorail Shop Panel Operator will then notify Monorail Central that the requested Zones have been de-energized.

MONORAIL CENTRAL, SHOP, POWER HAS BEEN DE-ENERGIZED TO THE EPCOT BEAM.

**Switching Monorail from
Express to Resort Beam**

All Switching procedures begin with a radio request from central.

MONORAIL SHOP, CENTRAL, YOU ARE CLEAR TO SWITCH MONORAIL(S) (COLORS) FROM EXPRESS TO RESORT. MONORAIL (COLOR) IS HOLDING AT PYLON #."

- Monorail Shop Panel Operator will repeat the radio device transmission to confirm that it was received and understood.
- Upon receiving verification from Central, via radio communications of which Monorails will be switched and in what order they will be switched, the Shop Panel Operator will then start the switching of Monorails by radio clearance with the following instructions:
- Verify the first Monorail is at Pylon 62 and all traffic and beam way is clear by making visual confirmation using the monitoring camera.
- Give command to drop power on both Resort and Express by:
- Turning the MASTER CONTROL switch to the ON position, and note on panel that the MAINLINE INDICATOR is illuminated green.
- Lift the SWITCHBEAM E-STOP.
- Push in the STA/SWB ENABLE button.
- Push in the EXPRESS and RESORT 600V trip buttons and verify power has de-energized.
- Turn the SWITCHBEAM switch to the CROSSOVER position.
- Push in the SWITCHBEAM ACTIVATION button.

- View the Magic Kingdom map and observe that the switchbeams are in motion (flashing messages that switches are in motion), visually verify that the switchbeams travel to the crossover position and lockdown. (Messages stop flashing and indicate switches are in crossover on monitoring panel).
- When locked down in the crossover position, push in the STA/SWB ENABLE button. This will allow 20 seconds to close the Express and Resort contactors by turning the RESORT and EXPRESS switches to the CLOSE position and verifying power has been energized
- Shop Panel Operator will then clear the Monorail, via radio communication, through switches, as follows:

MONORAIL (COLOR), SHOP, AT THIS TIME YOU ARE CLEAR TO MAPO OVERRIDE IN FORWARD THROUGH SWITCH BEAMS 2 & 1 TO PYLON 55, HOLD THERE AND NOTIFY CENTRAL.

- Monorail Pilot will repeat the radio device transmission to confirm that it was received and understood.



If the Monorail moves in a direction different than commanded, immediately de-energize the beam

NOTE: The Monorail Pilot will make a direct visual verification of proper switchbeam alignment prior to proceeding through any switches.

- When the Monorail arrives at Pylon 55, driver will notify Central of their 10-20 and status of beam contacts.
- Central will then clear the Monorail to the Contemporary.

- Once Monorail has confirmed via radio to Panel Operator that it is in the Contemporary, Shop Panel Operator is now clear to move the next Monorail (if applicable) from MK Station to Pylon 62 on the Express beam, hold and notify Central.
- The Shop will then clear the Monorail through switches Pylon 55 Resort Beam, hold and notify Central.

*SHOP, MONORAIL COLOR, YOU'RE CLEAR MAPO
OVERRIDE THROUGH THE SWITCHBEAMS TO
PYLON 55 ON THE RESORT BEAM, HOLD AND
NOTIFY CENTRAL.*

- Monorail Pilot will repeat the radio device transmission to confirm that it was received and understood.
- Continue Procedure if more than one Monorail switching off Express.
- Once the last Monorail switched from Express to Resort has reached Pylon 55, the Shop Panel Operator will then move Switchbeam 1 and 2 to the Mainline position by performing the following:
- Turn the MASTER CONTROL switch to the ON position, and note that the MAINLINE INDICATOR is illuminated green.
- Lift the SWITCHBEAM E-STOP.
- Push in the STA/SWB ENABLE button.
- Push in the EXPRESS and Resort 600V trip buttons and verify power has de-energized.
- Turn the SWITCHBEAM switch to the MAINLINE position.
- Push in the SWITCHBEAM ACTIVATION button.

- View the Magic Kingdom map and observe that the switchbeams are in motion (flashing messages that switches are in motion) and locks down on both Resort Mainline, Switchbeam 1, and Express Mainline, Switchbeam 2. (Messages stop flashing and indicate switches are in crossover on monitoring panel).
- When locked down in the Mainline position, push in the STA/SWB ENABLE button. This will allow 20 seconds to close the Express and Resort contactors by turning the RESORT and EXPRESS switches to the CLOSE position and verify power has been energized.
- Monorail Shop Panel Operator will then notify Central, via radio communications, the status of the resort Beam:

CENTRAL, SHOP, BE ADVISED, SWITCHBEAMS 1&2 MAINLINE WITH POWER."

- Central will repeat the radio device transmission to confirm that it was received and understood.

Switching Monorails from Resort to Express to Spur, and Express to Spur (Returning to Shop)

Explain to Trainee procedures for switching Monorails from Resort to Express to Shop Spur and Express to Shop Spur (returning to Shop)

- All Switching procedures begin with a radio request from central.

MONORAIL SHOP, CENTRAL, YOU ARE CLEAR TO SWITCH MONORAIL(S) (COLORS) FROM RESORT TO EXPRESS. MONORAIL (COLOR) IS HOLDING AT PYLON #.

- Monorail Shop Panel Operator will repeat the radio device transmission to confirm that it was received and understood.
- Upon receiving verification from Central, via radio communications of which Monorails will be switched and in what order they will be switched, the Shop Panel Operator will then start the switching of Monorails by radio clearance with the following instructions:
- Verify the first Monorail is at Pylon 58 and all traffic and beam way is clear by making visual confirmation using the monitoring camera.
- Give command to drop power on both Resort and Express, as follows:
- Turning the MASTER CONTROL switch to the ON position, and note on panel that the MAINLINE INDICATOR is illuminated green.
- Lift the SWITCHBEAM E-STOP.
- Push in the STA/SWB ENABLE button.
- Push in the EXPRESS and RESORT 600V kill switches.
- Verify Power dropped out across the switches.
- Turn the SWITCHBEAM switch to the CROSSOVER position.
- Push in the SWITCHBEAM ACTIVATION switch.

- View the Magic Kingdom map and observe that the switchbeam is in motion (observe flashing messages that switches are in motion), and visually verify, via the camera monitor, that the switchbeam travels to the Crossover position and locks down.

NOTE: Messages stop flashing, indicating switches are in Crossover on Monitoring Panel.

- When locked down in the Crossover position, push in the STA/SWB ENABLE switch. This will allow 20 seconds to close the Express and Resort contactors by turning the RESORT and EXPRESS switches to the CLOSE position.
- Verify power has been energized.
- After confirming closed, push SWITCHBEAM E-STOP button in and turn MASTER CONTROL switch to the off position.
- Monorail Shop Panel Operator will then clear the Monorail, via radio communication, through the switches as follows:

MONORAIL (COLOR), SHOP, AT THIS TIME YOU ARE CLEAR TO MAPO OVERRIDE IN FORWARD THROUGH SWITCH BEAMS 1 & 2 TO PYLON 66 HOLD THERE AND NOTIFY CENTRAL

- The Monorail Pilot will repeat the radio device transmission to confirm that it was received and understood.



If the Monorail moves in a direction different than commanded, immediately de-energize the beam.

NOTE: The Monorail Pilot will make a direct visual verification of proper switchbeam alignment prior to proceeding through any switches.

- When the Monorail arrives at Pylon 66, the Pilot will notify Central of his 10-20 and status of beam contacts.

- Central will then clear the monorail back to the Magic Kingdom.
- Once Monorail has confirmed, via radio, to Panel Operator that it is in the Magic Kingdom, Shop Panel Operator is now clear to move the next Monorail (if applicable) from Contemporary Station to Pylon 58 Resort beam, hold and notify Central.
- Shop will then clear the Monorail from Pylon 58 Resort Beam through the switchbeams to Pylon 66 Express Beam, hold and notify Central

SHOP, MONORAIL (COLOR) YOU'RE CLEAR MAPO OVERRIDE THROUGH THE SWITCHBEAMS TO PYLON 66 EXPRESS BEAM, HOLD AND NOTIFY CENTRAL.

- Continue Procedure if more than one Monorail switching off Resort.
- Once the last Monorail switched from Resort to Express has reached the Pylon 66, the Shop Panel Operator will then move Switchbeam 1 to the Mainline and Switchbeam 2 into Spurline position by performing the following:
- Turn the MASTER CONTROL switch to the ON position, and note that the MAINLINE INDICATOR is illuminated green.
- Lift the SWITCHBEAM E-STOP.
- Push in the STA/SWB ENABLE button.
- Push in the EXPRESS and Resort 600V De-Energize button.
- Verify power has dropped out across the switches.
- Turn the SWITCHBEAM switch to the SPUR position.
- Push in the SWITCHBEAM ACTIVATION button.
- View the Magic Kingdom map and observe that the switchbeam is in motion (flashing message that switches are in motion) and locks down on both Resort Mainline, Switchbeam 1, and shop Spurline, Switchbeam 2.

NOTE: Messages stop flashing and indicate switchbeam 2 is in shop spur line position and switchbeam 1 is in mainline position.

- When locked down in the Spur position, push in the STA/SWB ENABLE switch. This will allow 20 seconds to close the Express and Resort contactors by turning the RESORT and EXPRESS switches to the CLOSE position.
- Verify power has been energized.
- Monorail Shop Panel Operator will then notify Central, via radio communications, the status of the Resort Beam:

CENTRAL, SHOP, BE ADVISED, RESORT BEAM IS NOW MAINLINE WITH POWER.

- Central will repeat the radio device transmission to confirm that it was received and understood.
- Central will then notify the Monorail Shop Panel Operator, via radio communications, of the Monorail line-up that is now cleared to move from Express to Spur.

NOTE: These are the same procedures used when switching a Monorail from Express to Shop Spur.

- View the MONORAIL SHOP CONTROL PANEL to verify switch beams are lined up correctly for the Monorail being dispatched in or out of shop.
- Verify the Monorail shop door for the appropriate beam is open.
- If applicable, on the Disconnect Cabinet (BEAM DISC), remove lock and place handle to the ON position. Reapply the lock.
- Sound the Notification Alarm and make a general shop announcement alerting Monorail Shop Personnel that the beam is coming hot. For example:

BEAM #2 COMING HOT; BEAM #2 COMING HOT

- After visually verifying that all personnel are clear of the beam, energize the beam by turning the 600Vdc power switch (TURN 600V ON, PUSH 600V OFF) to the left, on MONORAIL SHOP CONTROL PANEL.
- Observe that lights on the selected beam are flashing and shop bell is ringing.
- Verify the beam has been energized by visually checking status lights on MONORAIL SHOP CONTROL PANEL have illuminated red, and visually checking power meters on the WEST STORAGE BEAMWAY METER PANEL (west side of shop) or on the EAST STORAGE BEAMWAY CONTROL PANEL (east side of shop).
- Verify that the chiller plant contactor closes, as indicated by the status light on the MAGIC KINGDOM POWER STATUS board.

Monorail Panel Operator will switch the Monorails from Express to Spur, using the following radio commands:

MONORAIL (COLOR), SHOP, YOU ARE NOW CLEAR IN FORWARD THROUGH THE SWITCHES USING MAPO OVER RIDE TO NORTH SIDE OF THE CHILLER PLANT (OR SOUTH SIDE OF SWITCH BEAM 3 IF FIRST TRAIN). HOLD THERE AND NOTIFY SHOP.

- The Monorail Pilot will repeat the radio device transmission to confirm that it was received and understood.



If the Monorail moves in a direction different than commanded, immediately de-energize the beam.

- Once clear of Switchbeam 2, the Monorail will notify the Shop Panel Operator of the status of the Monorail's beam contacts.

- Once the Monorail is holding at the North Side of the chiller plant or the Shop Panel Operator has visually verified that the Monorail has rounded the corner around Space Mountain, the Shop Panel Operator will clear the next Monorail from the Magic Kingdom to Pylon 62, using the following radio commands:

MONORAIL (COLOR), SHOP, YOU ARE NOW CLEAR IN FORWARD USING MAPO OVER RIDE TO PYLON 62. HOLD THERE AND NOTIFY CENTRAL

- The Monorail Pilot will repeat the radio device transmission to confirm that it was received and understood.
- Once the first Monorail reaches the South side of Switchbeam 3 and notifies the Shop Panel Operator, via radio communications, the Shop Panel Operator will clear the first Monorail into the shop.

MONORAIL (COLOR), SHOP, NOSE LIGHT OUT, YOU ARE CLEAR TO MAPO OVERRIDE IN FORWARD ALL THE WAY TO SHOP, BEAM #.

- The Monorail Pilot will repeat the radio device transmission to confirm that it was received and understood.



If the Monorail moves in a direction different than commanded, immediately de-energize the beam.

- At this time the Shop Panel Operator will clear the Monorail holding at Pylon 62 to the North side of the chiller plant, using established procedures:
- As the nose of the monorail enters the shop, you must be in a position from where you can observe the monorail and have your hand on a 600V trip switch, ready to kill power and stop monorail motion quickly, should that be necessary.

- When the monorail is parked at the designated location in the shop, remove power by pushing 600V Kill button, place the appropriate status clip on the monorail and attach the air hose.
- Lockout the beam by placing the handle on the appropriate beam disconnect (BEAM DISC) cabinet to the OFF position.

NOTE: Repeat this process until all scheduled monorails are in the shop.

Moving Switchbeams in the Shop

Verify switchbeams are lined up correctly with selected beam, by visually checking the panel indicator lights and the video monitor.

- If needed, move switchbeam(s) by selecting proper beam location on the Shop Beam Control panel switch and press the center button.
- Lock Down light extinguishes and in a few moments switch will begin move.
- Verify that the switch has locked down (indicated by lock down light and viewing video monitor).
- Verify the shop door for the appropriate beam is open.
- If applicable, on the Beam Disconnect Cabinet (BEAM DISC), remove lock and push/pull handle to the ON position and reapply lock.
- Press the Horn Button 2 to 3 times and make a shop announcement alerting personnel that the beam is coming hot (energized).

BEAM #2, BLACK TRAIN, COMING HOT; BEAM #2 BLACK COMING HOT.

- Turn the power button on the control panel to energize the selected beam.
- Verify power is applied to the correct beam via visual confirmation on the 600 VDC meters on the WEST STORAGE BEAMWAY METER PANEL for beams 1 thru 5 or the EAST STORAGE BEAMWAY CONTROL PANEL for beams 6 thru 10.

Moving Epcot Switchbeams

All switching procedures begin with a radio request from Central.

MONORAIL SHOP, CENTRAL, YOU ARE CLEAR TO MOVE SWITCHBEAMS 8 AND 9 TO THE SPURLINE WITH POWER.

- The Monorail Shop Panel Operator will repeat the radio device transmission to confirm that it was received and understood.

NOTE: Movement sequences for 8 & 9 can be performed simultaneously.

Moving Switchbeam 8 to the Spurline with power is accomplished, as follows:

- Turn the MASTER CONTROL switch to the ON position.
- Pull out the SWITCHBEAM KILL button.
- View the EPCOT Monitoring System monitor and verify the status/position of Switchbeam 8.
- Press the SWITCHBEAM ENABLE push button and, while it is illuminated, touch the Switchbeam Control block on the EPCOT MONORAIL SYSTEM touch screen monitor.
- On the EPCOT Monitoring System monitor, touch the De-energize SwitchBeam 8 button.
- Verify that Switchbeam 8 is de-energized and touch the Switchbeam 8 to Spur button on the touch screen monitor.
- Verify the switch beam is moving by viewing the EPCOT Monitoring System monitor (the switchbeam is flashing).
- Verify that the switchbeam has locked down in the correct position (flashing stops and Switchbeam 8 indicates it's in the Spur position).
- Press the SWITCHBEAM ENABLE push button and, while it is illuminated, touch the Switchbeam Control block on the EPCOT MONORAIL SYSTEM touch screen monitor.

- Energize the Switchbeam 8 by touching Switchbeam Energize 8.
- Visually verify, on the panel, that power has been energized.
- Notify Monorail Central that Switchbeam 8 is on the Spurline with power.

*MONORAIL CENTRAL, SHOP, BE ADVISED,
SWITCHBEAM 8 ON THE SPURLINE WITH POWER*

Moving Switchbeam 9 to the Spurline with power is accomplished, as follows:

- Turning the MASTER CONTROL switch to the ON position.
- Pull out the SWITCHBEAM KILL button.
- View the EPCOT Monitoring System monitor and video monitor, and verify the status/position of Switchbeam 9.
- Press the SWITCHBEAM ENABLE push button and, while it is illuminated, touch the Switchbeam Control block on the EPCOT MONORAIL SYSTEM touch screen monitor.
- On the EPCOT Monitoring System monitor, touch the De-energize Switchbeam 9 button.
- Verify that Switchbeam 9 is de-energized and touch the Switchbeam 9 to Spur button on the touch screen monitor.
- Verify the switchbeam is moving by viewing the EPCOT Monitoring System monitor (the switchbeam is flashing) and the video monitor.

- Verify that the switchbeam has locked down in the correct position (flashing stops and Switchbeam 9 indicates it's in the Spur position).
- Press the SWITCHBEAM ENABLE push button and, while it is illuminated, touch the Switchbeam Control block on the EPCOT MONORAIL SYSTEM touch screen monitor.
- Energize the Switchbeam 9 by touching Switchbeam Energize 9.
- Visually verify, on the panel, that power has been energized.
- Notify Monorail Central that Switchbeam 9 is on the Spurline with power.

MONORAIL CENTRAL, SHOP, BE ADVISED, SWITCH BEAM 9 ON THE SPURLINE WITH POWER.

Moving Switchbeam 8 to the Mainline with power is accomplished, as follows:

- Turn the MASTER CONTROL switch to the ON position.
- Pull out the SWITCHBEAM KILL button.
- View the EPCOT Monitoring System monitor and verify the status/position of switch beam 8.
- Press the SWITCHBEAM ENABLE push button and, while it is illuminated, touch the Switch beam Control block on the EPCOT MONORAIL SYSTEM touch screen monitor.
- On the EPCOT Monitoring System monitor, touch the De-energize Switch beam 8 button.
- Verify that switch beam 8 is de-energized and touch the Switchbeam 8 to Main button on the touch screen monitor.
- Verify the switch beam is moving by viewing the EPCOT Monitoring System monitor (the switch beam is flashing).
- Verify that the Switch Beam has locked down in the correct position (flashing stops and switch beam 8 indicates it's in the Main position).
- Press the SWITCHBEAM ENABLE push button and, while it is illuminated, touch the Switch beam Control block on the EPCOT MONORAIL SYSTEM touch screen monitor.
- Energize the switchbeam 8 by touching Switchbeam Energize 8.
- Visually verify, on the panel, that power has been energized.
- Notify Monorail Central that Switch Beam 8 is on the Mainline with power.

*MONORAIL CENTRAL, SHOP, BE ADVISED,
SWITCHBEAM 8 ON THE MAINLINE WITH POWER.*

Moving Switchbeam 9 to the Mainline with power is accomplished with the following instructions:

- Turning the MASTER CONTROL switch to the ON position.
- Pull out the SWITCHBEAM KILL button.
- View the EPCOT Monitoring System monitor and video monitor and verify the status/position of Switchbeam 9.
- Press the SWITCHBEAM ENABLE push button and, while it is illuminated, touch the Switchbeam Control block on the EPCOT MONORAIL SYSTEM touch screen monitor.
- On the EPCOT Monitoring System monitor, touch the De-energize Switchbeam 9 button.
- Verify that Switchbeam 9 is de-energized and touch the Switchbeam 9 to Main button on the touch screen monitor.
- Verify the switchbeam is moving by viewing the EPCOT Monitoring System monitor (the switchbeam is flashing) and the video monitor.
- Verify that the switchbeam has locked down in the correct position (flashing stops and Switchbeam 9 indicates it's in the Main position).
- Press the SWITCHBEAM ENABLE push button and, while it is illuminated, touch the Switchbeam Control block on the EPCOT MONORAIL SYSTEM touch screen monitor.
- Energize the Switchbeam 9 by touching Switchbeam Energize 9.
- Visually verify, on the panel, that power has been energized.
- Notify Monorail Central that Switchbeam 9 is on the Mainline with power.

*MONORAIL CENTRAL, SHOP, BE ADVISED,
SWITCHBEAM 9 ON THE MAINLINE WITH POWER.*

Bringing Up and Taking Down Rectifiers

Taking Down or Bringing Up Rectifiers will be at the direction of the management team, or as circumstances require.

Taking Down a Rectifier on the Magic Kingdom System

A Qualified Panel Operator will perform the following procedure to Take Down a Rectifier in the Magic Kingdom:

- Turn the MASTER CONTROL switch to ON.
- View the MAGIC KINGDOM POWER STATUS board and verify that the MAINLINE CONTROL indicator light is illuminated.
- Turn the CONTACTOR SELECT switch to RECTIFIER.
- Push in the ENABLE switch for the Rectifier being taken down.
- The switch will illuminate and only be enabled for ten seconds
- Push in either of the Red Push Buttons on the breaker panel switches
- View the map to verify that the appropriate rectifier has de-energized.
- Turn the MASTER CONTROL switch to the OFF position, and note that the MAINLINE CONTROL indicator is extinguished.

**Bringing Up a Rectifier on
the Magic Kingdom
System**

A Qualified Panel Operator will perform the following procedure to Bring Up a Rectifier in the Magic Kingdom:

- Turn the MASTER CONTROL switch to ON.
- View the MAGIC KINGDOM POWER STATUS board and verify that the MAINLINE CONTROL indicator light is illuminated.
- Turn the CONTACTOR SELECT switch to RECTIFIER.
- Push in the ENABLE switch for the Rectifier being brought up. The switch will illuminate and only be enabled for ten seconds.
- Turn either rectifier breaker switches to the TURN TO CLOSE position.
- View the map to verify that the appropriate rectifier has energized.
- Turn the MASTER CONTROL switch to the OFF position, and note that the MAINLINE CONTROL indicator is extinguished.

**Taking Down a Rectifier
on Epcot System**

A Qualified Panel Operator will perform the following procedure to Take Down a Rectifier in Epcot:

- Observe that the touch screen Epcot control panel is activated. If Epcot panel is in screen saver mode, touching the screen will cause it to activate.
- Turn the SYSTEM MASTER switch to ON.
- Push in the ENABLE switch, then while it is enabled for 15 seconds,
- Touch the Rectifier Control block.
- Touch the De-energize block for the Rectifier being taken down. For Rectifier One it will only be one block De-energize.
- Touch the De-energize West and East Block. For Rectifier one De-energize
- View the map to verify that the appropriate rectifier has de-energized.
- Turn the SYSTEM MASTER switch to OFF.

**Bringing Up a Rectifier on
Epcot System**

A Qualified Panel Operator will perform the following procedure to Bring Up a Rectifier in Epcot:

- Observe that the touch screen Epcot control panel is activated. If Epcot panel is in screen saver mode, touching the screen will cause it to activate.
- Turn the SYSTEM MASTER switch to ON.
- Push in the ENABLE switch, then while it is enabled for 15 seconds,
- Touch the Rectifier Control block.
- Touch the Energize block for the Rectifier being brought up.
- Touch the Energize West and East Block. For Rectifier One it will only be one block Energized
- View the map to verify that the appropriate rectifier has energized.
- Turn the SYSTEM MASTER switch to OFF.

**Bring Up Line Up
Contactors on the Magic
Kingdom System**

A Qualified Panel Operator will perform the following procedure to Bring Up Line Up Contactors in the Magic Kingdom:

- Turn the MASTER CONTROL switch to the ON position, and note that the MAINLINE CONTROL indicator is illuminated green.
- Turn the CONTACTOR SELECT switch to the LINEUP A for Breaker numbers that are colored green, or Lineup B for Breaker numbers that are colored Blue.
- Push in the ENABLE switch corresponding to the lineup contactor that requires power. The switch will illuminate and only be enabled for ten seconds.
- Turn the Breaker switch to the TURN TO CLOSE position. Hold in that position for one to two seconds, then slowly release.
- View the map to verify that the appropriate contactor has energized.
- Turn the MASTER CONTROL switch to the OFF position, and note that the MAINLINE CONTROL indicator is extinguished.

**Take Down Line Up
Contactors on the Magic
Kingdom System**

A Qualified Panel Operator will perform the following procedure to Take Down Line Up Contactors in the Magic Kingdom:

- Turn the MASTER CONTROL switch to the ON position, and note that the MAINLINE CONTROL indicator is illuminated green.
- Turn the CONTACTOR SELECT switch to the LINEUP A for Breaker numbers that are colored green, or Lineup B for Breaker numbers that are colored Blue.
- Push in the ENABLE switch corresponding to the lineup contactor that will be de-energized. The switch will illuminate and only be enabled for ten seconds.
- Push the Breaker switch Red push button to open. Hold in that position for one to two seconds, then release.
- View the map to verify that the contactor has de-energized.
- Turn the MASTER CONTROL switch to the OFF position, and note that the MAINLINE CONTROL indicator is extinguished.

**Bring Up Line Up
Contactors on Epcot
System**

A Qualified Panel Operator will perform the following procedure to Bring Up Line Up Contactors in Epcot:

- Observe that the touch screen Epcot control panel is activated. If Epcot panel is in screen saver mode, touching the screen will cause it to activate.
- Turn the SYSTEM MASTER switch to ON.
- Touch the Line up in the EPCOT Loop Graphic that will be energized.
- Push in the ENABLE switch, then while it is enabled for 15 seconds,
- Touch the Contactor handle graphic that will be energized and note the color will blink Green (open) several times until it changes to Red (Closed), indicating it has closed.
- View the map to verify that the appropriate Line up is energized.

**Take Down Line Up
Contactors on Epcot
System**

A Qualified Panel Operator will perform the following procedure to Take Down Line Up Contactors in Epcot:

- Observe that the touch screen Epcot control panel is activated. If Epcot panel is in screen saver mode, touching the screen will cause it to activate.
- Turn the SYSTEM MASTER switch to ON.
- Touch the Line up in the EPCOT Loop Graphic that will be De-energized.
- Push in the ENABLE switch, then while it is enabled for 15 seconds,
- Touch the Contactor handle graphic that will be de-energized and note the color will change from Red (Closed) to Green (OPEN)
- View the map to verify that the appropriate Line up is de-energized.
- Turn the SYSTEM MASTER switch to OFF.

Documentation Review

Provide the Trainee the opportunity to read the Update Training Guide.

- Verify the Trainee has read the Update Training Guide.

Conclude Update Procedures

Ask the Trainee if he has questions.

Complete Training Verification.